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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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| 08/961,084 | 10/30/97 | KRONGAUZ | V 240606 |

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IM22/0524

EXAMINER

BERMAN, S

ART UNIT PAPER NUMBER

1711

8

DATE MAILED: 05/24/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/961,084

Applicant(s)
Krongauz et al.

Examiner
Susan Berman

Group Art Unit
1711



☒ Responsive to communication(s) filed on Apr 12, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-22 and 24-26 is/are pending in the application.

Of the above, claim(s) 1-17, 20-22, and 24-26 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 18 and 19 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Election/Restriction

Applicant's election of Group II, claims 18-19, in Paper No. 7 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-17, 20-22, 24-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to non-elected invention Groups I and III set forth in paper number 6.

Claim Rejections - 35 USC § 102 and/or 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 18-19 are rejected under 35 U.S.C. § 102(b) as being anticipated by Lee et al (4,786,586). Lee et al teach compositions comprising acrylate-terminated urethane oligomers wherein the hydrocarbon backbone is fully saturated. Lee et al teach that the fully saturated hydrocarbons are preferred because the long-term flexibility of the resulting cured coating increases as the degree of unsaturation decreases (column 3, lines 17-45).

The properties of the cured coating prepared by radiation curing the instantly claimed composition set forth in claim 18 are considered to be a statement of future intended properties and not of any patentable weight in the absence of a showing of unexpected results. Furthermore, the properties set forth would be expected to be inherent to cured coatings prepared from the compositions disclosed by Lee et al because the components of the disclosed coating compositions correspond to the components as set forth in the instant claims.

Claim 18 is rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Mori et al (4,031,066). Mori et al disclose a flexible polybutadiene resin composition, a solid plasticizer and a vinyl monomer. The polybutadiene resin can be an acrylated urethane, as shown in the examples. The composition is said to provide excellent electrical properties, such as dielectric dissipation factor, etc (see column 1, lines 49-52, and column 6, lines 22-34 and Table 3). The compositions disclosed by Mori et al comprising a thermosetting polybutadiene resin containing a urethane linking group anticipate the instantly claimed composition. Alternatively, It would have been obvious to one skilled in the art

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to select acrylated urethane polybutadienes from the polybutadiene resins taught because urethanes are used in the Examples. The properties of the cured coating prepared by radiation curing the claimed composition are considered to be a statement of future intended properties and not of any patentable weight in the absence of a showing of unexpected results.

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Mori et al (4,031,066) in view of Lee et al (4,786,586). Mori et al disclose the claimed invention except for the requirement that the hydrocarbon backbone be fully saturated. Mori et al teach hydrogenization up to 95 % of unsaturated double bonds in the polybutadiene chain. Lee et al teach analogous compositions comprising acrylate-terminated oligomers wherein the hydrocarbon backbone is fully saturated. Lee et al teach that the fully saturated hydrocarbons are preferred because the long-term flexibility of the cured coating increases as the degree of unsaturation decreases (column 3, lines 17-45). It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute an acrylated urethane oligomer having a fully saturated backbone, as taught by Lee et al, for the acrylated urethane oligomer in the compositions disclosed by Mori et al in order to provide long term flexibility, as taught by Lee et al.

Claims 18-19 are rejected under 35 U.S.C. § 102(b) as anticipated by Krajewski (4,572,610). Krajewski teaches that it is known to provide coating compositions comprising a

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diethylenic diurethane having a halogen-containing essentially saturated polybutadiene backbone. Krajewski teaches that removal of the unsaturation in the backbone avoids heat instability without introducing brittleness (column 2, lines 42-52).

The properties of the cured coating prepared by radiation curing the instantly claimed composition set forth in claim 18 are considered to be a statement of future intended properties and not of any patentable weight in the absence of a showing of unexpected results. Furthermore, the properties set forth would be expected to be inherent to cured coatings prepared from the compositions disclosed by Krajewski because the components of the disclosed coating compositions correspond to the components as set forth in the instant claims.

Claims 18-19 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Shustack (5,352,712). Shustack discloses coating compositions comprising a hydrocarbon polyol based reactively terminated aliphatic urethane oligomer. See column 9, lines 1-53.

The properties of the cured coating prepared by radiation curing the instantly claimed composition set forth in claim 18 are considered to be a statement of future intended properties and not of any patentable weight in the absence of a showing of unexpected results. Furthermore, the properties set forth would be expected to be inherent to cured coatings prepared from the compositions disclosed by Shustack because the components of the disclosed coating compositions correspond to the components as set forth in the instant claims.

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Specification

The disclosure is objected to because of the following informalities: the formula of the phosphate monomer on page 16 does not show the double bonds ($C=O$ and $P=O$). It appears that the graphs in Figures 4(a) and 4(b) are incomplete. Appropriate correction is required.

Information Disclosure Statement

The translation of Japanese patent Application 5-215279 has been received and has been considered. Applicant submitted an I.D.S. on 04-17-98 which is missing from the file. Applicant is requested to send a copy of the missing IDS and copies of any foreign references cited thereon.

Conclusion

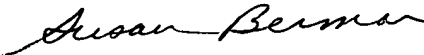
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Su (5,013,631) discloses UV curable conformal coatings comprising an acrylate-urethane oligomer and having good electrical properties. Drain et al (4,826,705) disclose compositions for masking electrical components.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Berman whose telephone number is (703) 308-0040.

The fax number for this group is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0651.

SB
May 19, 1999


Susan Berman
Primary Examiner
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